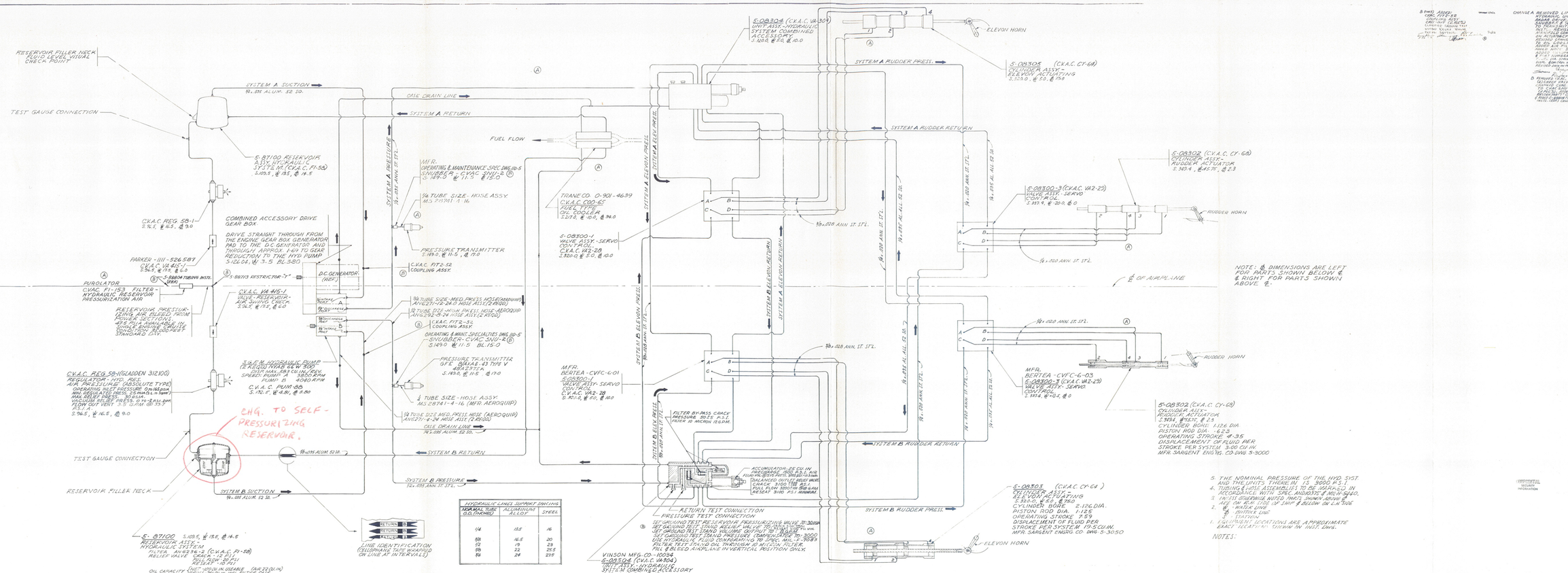
RESERVOIR FILLER NECK
FLUID LEVEL VISUAL CHECK POINT
TEST GAUGE CONNECTION
SYSTEM A SUCTION
1¼ x .035 ALUM. SAE 20.
5-87100 RESERVOIR ASSY. HYDRAULIC SYSTEM (C.V.A.C. FI-58)
S.105.5, W 13.5, @ 14.5
C.V.A.C. REG. 58-1
S.16.2, W 4.2, @ 9.0
PARKER - 1111 - 526-581
C.V.A.C. VA 415-1
S.94.5, W 17.5, @ 6.0
5-88804 TUBING ASSY.
PUROLATOR
C.V.A.C. FI-153 FILTER - HYDRAULIC RESERVOIR PRESSURIZATION AIR
RESERVOIR PRESSURIZING AIR BLEED FROM ENGINE HYD. SYST. AT 4% FLOW. CHECK RESTRICTOR IN CONNECTION TO CHECK FOR STANDARD CAV.
C.V.A.C. REGULATOR - H.P.D. REG. AIR PRESSURE (ABSOLUTE TYPE)
OPERATING INLET PRESSURE 0 to 1500 psia
MIN. REGULATED PRESS. 25 PSIA (5.15 Span)
MAX. RELIEF PRESS. 30 PSIA
VACUUM RELIEF PRESS. 10 to 3 PSIA (3 PSI)
FLOW OUT VENT 1.5 CuFt/M (@ 75.7 PSIA)
S.96.5, W 16.5, @ 9.0
CHG. TO SELF-PRESSURIZING RESERVOIR.
RESERVOIR FILLER NECK
TEST GAUGE CONNECTION
5-87100 RESERVOIR ASSY. HYDRAULIC SYSTEM (C.V.A.C. FI-58)
FILTER - AN 929-8 (CRACK - 12 PSI)
RELIEF VALVE - AN 827-8 (CRACK - 1500 PSI)
RESET - 1310 PSI
OIL CAPACITY (USE HOUSE IN USABLE (AIR 22 CU.IN)
(AN 5511 - 20 CU.IN. INCL. FILTER CASE)
TOTAL SYSTEM FLUID CAPACITY - 457 CU.IN.
POSITION OF OPERATING CYLINDERS, COOLING FILLING, OPTIONAL, CONTROLS - ANY POSITION.
USE ONLY HYDRAULIC FLUID (COLOR AMBER SPEC. MIL-F-7083 AIR)
S. 103.5, W 13.5, @ 14.5
COMBINED ACCESSORY DRIVE GEAR BOX.
DRIVE STRAIGHT THROUGH FROM THE ENGINE GEAR BOX GENERATOR PAD TO THE D.C. GENERATOR AND THROUGH APPROX. 1.69 TO GEAR REDUCTION TO THE HYD. PUMP
S-CL-04, W 3.5 BL-380
S-88813 RESTRICTOR "T"
D.C. GENERATOR (REF.)
C.V.A.C. VA 415-1 VALVE - RESERVOIR AIR SWING CHECK
S.94.5, W 17.5, @ 6.0
C.V.A.C. FIT 2-52 COUPLING ASSY.
SYSTEM A SUCTION
1¼ x .035 ALUM. SAE 20.
SYSTEM A PRESSURE
1¼ x .049 ANN. ST. STL.
SYSTEM B SUCTION
1¼ x .035 ALUM. SAE 20.
SYSTEM B PRESSURE
1¼ x .035 ANN. ST. STL.
CASE DRAIN LINE
¾ x .035 ALUM. SAE 20.
SYSTEM A RETURN
1¼ x .035 ANN. ST. STL.
SYSTEM B RETURN
1¼ x .035 ALUM. SAE 20.
FUEL FLOW
M.F.R. OPERATING & MAINTENANCE SPEC. DWG. 88-5 SNUBBER - C.V.A.C. SNU-2 S.149.0, W 11.5 BL 15.0
¼ TUBE SIZE - HOSE ASSY. MS 28741-4-16
PRESSURE TRANSMITTER
C.V.A.C. FIT 2-52 COUPLING ASSY.
¾ TUBE SIZE MED. PRESS. HOSE (AEROQUIP) AN 6271-4-24.5 HOSE ASSY. (2 REQD.)
¾ TUBE SIZE HIGH PRESS. HOSE AEROQUIP AN 6290-8-24 HOSE ASSY. (2 REQD.)
C.V.A.C. FIT 2-32 COUPLING ASSY.
OPERATING & MAINT. SPECIALTIES DWG. 88-5 SNUBBER - C.V.A.C. SNU-2 (2) S.149.0 W 11.5 BL. 15.0
PRESSURE TRANSMITTER GFE (MAKE - 43 TYPE V 4843 2751A S.143.0, W 11.5 @ 17.0
¼ TUBE SIZE - HOSE ASSY. MS 28741-4-16 (MFR. AEROQUIP)
¼ TUBE SIZE MED. PRESS. HOSE (AEROQUIP) AN 6271-4-24 HOSE ASSY. (2 REQD.)
CASE DRAIN LINE
¾ x .035 ALUM. SAE 20.
3/8 E.M. HYDRAULIC PUMP (3 PAD) 3.03 IN/R W/ 9.00 SPLINE MIN. 1.583 CU IN/REV. SPEED RANGE 3000 - 4000 RPM
PUMP - B 4060 RPM
C.V.A.C. PUMP 088
S. 132.5, W 41.81, @ 8.00
TRANE CO. O-901-4639 C.V.A.C. COO-65 FUEL TYPE OIL COOLER
S.27.6, W 10.0, @ 34.0
S-08300-1 VALVE ASSY. - SERVO CONTROL C.V.A.C. VA2-28
S.320.0, W 5.0, @ 10.0
M.F.R. BERTEA - CVFC-6-01 S-08300-1 VALVE ASSY. SERVO CONTROL C.V.A.C. VA2-28
S. 320.0, W 5.0, @ 150
FILTER BY-PASS CRACK PRESSURE 50 P.S.I. FILTER 10 MICRON (RATED)
ACCUMULATOR - 22 CU. IN. PRECHARGE 1000 P.S.I. AIR FLUID PRESS. RATE 3000 P.S.I. (MAX.)
BALANCED OUTLET RELIEF VALVE CRACK 3100 TO 3150 P.S.I. FULL FLOW 3200 TO 3250 G.P.M. RESET 3100 P.S.I. MINIMUM
RETURN TEST CONNECTION
PRESSURE TEST CONNECTION
SET GROUND TEST STAND RELIEF VALVE TO 3000 P.S.I. SET GROUND TEST STAND VOLUME OUTPUT TO 3 G.P.M. SET GROUND TEST STAND PRESSURE COMPENSATOR TO 3050 USE HYDRAULIC FLUID CONFORMING TO SPEC. MIL-F-7083 FILTER TEST STAND OIL THROUGH 20 MICRON FILTER FILL & BLEED A/P LINES IN VERTICAL POSITION ONLY.
VINSON MFG. CO - 10034 S-08304 (C.V.A.C. VA304) UNIT ASSY. - HYDRAULIC SYSTEM COMBINED ACCESSORY S.320.0, W 5.0, @ 150
S-08304 (C.V.A.C. VA-304) UNIT ASSY. - HYDRAULIC SYSTEM COMBINED ACCESSORY S.320.0, W 5.0, @ 10.0
ELEVON HORN
S-08305 (C.V.A.C. CY-64) CYLINDER ASSY. - ELEVON ACTUATING S.323.0, W 5.0, @ 15.9
SYSTEM A RUDDER PRESS.
SYSTEM A RUDDER RETURN
SYSTEM A ELEVON PRESS.
SYSTEM A ELEVON RETURN
SYSTEM B ELEVON PRESS.
SYSTEM B ELEVON RETURN
SYSTEM B RUDDER RETURN
SYSTEM B RUDDER PRESS.
¾ x .028 ANN. ST. STL.
¾ x .035 ALL ALUM. SAE 20.
S-08302 (C.V.A.C. CY-62) CYLINDER ASSY. - RUDDER ACTUATOR S.323.4, W 4.5 TP, @ 2.3
S-08300-3 (C.V.A.C. VA2-23) VALVE ASSY. - SERVO CONTROL S.317.9, W 20.0, @ 0
RUDDER HORN
¼ x .020 ANN. ST. STL.
NOTE: @ DIMENSIONS ARE LEFT FOR PARTS SHOWN BELOW ℄ & RIGHT FOR PARTS SHOWN ABOVE ℄.
℄ OF AIRPLANE
MFR. BERTEA - CVFC-6-03 S-08300-3 (C.V.A.C. VA2-23) VALVE ASSY. - SERVO CONTROL S.317.9, W 20.0, @ 0
S-08302 (C.V.A.C. CY-62) CYLINDER ASSY. - RUDDER ACTUATOR S.323.4, W 4.5 TP, @ 2.3
CYLINDER BORE: 1.126 DIA.
PISTON ROD DIA.: .623
OPERATING STROKE: 4.35
DISPLACEMENT OF FLUID PER STROKE PER SYSTEM 3.00 CU. IN.
MFR. SARGENT ENG'RG. CO. DWG. S-3000
S-08305 (C.V.A.C. CY-64) CYLINDER ASSY. - ELEVON ACTUATING S.323.0, W 5.0, @ 15.9
CYLINDER BORE 2.126 DIA.
PISTON ROD DIA. 1.125
OPERATING STROKE 7.59
DISPLACEMENT OF FLUID PER STROKE PER SYSTEM 19.5 CU.IN.
MFR. SARGENT ENG'RG. CO. DWG. S-3050
ELEVON HORN
RETURN B
RETURN A
PRESS. B
PRESS. A
(LINE IDENTIFICATION (CELLOPHANE TAPE WRAPPED ON LINE AT INTERVALS)

HYDRAULIC LINES SUPPORT SPACING

NORMAL TUBE O.D. (INCHES)	ALUMINUM ALLOY	STEEL
1/4	13.5	16
5/16	16.5	20
3/8	19	23
1/2	23	25.5
5/8	24	27.5

NOTES:

1. EQUIPMENT LOCATIONS ARE APPROXIMATE EXACT LOCATION SHOWN ON INST. DWG.
2. @ - WATER LINE
   ℄ - BUTTOCK LINE
   ⊕ - STATION
3. UNLESS OTHERWISE NOTED, PARTS SHOWN ABOVE ℄ ARE ON RIGHT SIDE OF SHIP & BELOW ON L.H. SIDE
4. TUBING & HOSE ASSEMBLIES TO BE MARKED IN ACCORDANCE WITH SPEC. MIL-STD-130 & MIL-H-5440.
5. THE NOMINAL PRESSURE OF THE HYD. SYST. AND THE UNITS THERE IN IS 3000 P.S.I.

CHANGE A REMOVED LINES & HYDRAULIC UNITS OF RADAR DRIVE ADDED NEW LINES & UNITS TO TRANSMITTER REVISED IN ACCORDANCE WITH ENGINEERING REVISED CONNECTIONS OF LINES ADDED AIR FILTER ADDED NOTE 5 ADDED CAPTURES & TEXT NUMBERS) DISTR. FOR STRIKE & ADD REVISED DRAWING PREP. BY

B REMOVED 12 AC 13 - 878 ADDED 12 AC 13 - 879 CHANGED CONNECTION TO "CAV. SNU-2" REVISED TO AGREE WITH REVISED SHIP PREP. BY

Approved for Release Contract N0bsr

NONE

HYDRAULIC SYSTEM SCHEMATIC DIAGRAM

5-80001

REV. 5-28-56

DIFFERENTIAL SECURITY INFORMATION

5-80001

AWG 4246 B